| Task  | 1996             | 1997<br>(Jan-Aug)<br>(1997 Report)              | 1997<br>(Jan-Dec)<br>(1998 Report) | 1998<br>(Jan-Dec)<br>(1999 Report)             | 1999<br>(Jan-Dec)<br>(2000 Report)                                   | 2000<br>(Jan-Dec)<br>(2001 Report)  | 2001<br>(Jan-Dec)<br>(2002 Report)   | 2002<br>(Jan-Dec)<br>(2003 Report)   | 2003<br>(Jan-Dec)<br>(2004 Report)  | 2004<br>(Jan-Dec)<br>2005 Report | 2005<br>(Jan-Dec)<br>2006 Report |
|---|------------------|---|------------------------------------|--|--|---|--|--|---|----------------------------------|----------------------------------|
| MAINTAIN DRAINAGE FACILITIES (INVENTORY)  |                  |   |                                    | •  |  |   |  | •  |   |                                  |                                  |
| <ul><li>curb &amp; gutter lineal feet(Roads)</li></ul>  | 6,280,889        | 5,315,105                                       | 5,315,105                          | 3,878,642                                      | 3,668,024  | 3,441,640   | 3,459,334  | 3,413,517  | 3,421,345   |                                  |                                  |
| catch basins (Roads)  | 54,779           | 32,808  | 32,808                             | 33,452   | 31,902   | 30,377  | 30,389   | 30,490   | 30,695  |                                  |                                  |
| <ul> <li>paved ditch lineal feet (Roads)</li> </ul>   | 148,617          | 169,302   | 169,302                            | 112,691  | 96,901   | 92,438  | 90,258   | 88,236   | 88,611  |                                  |                                  |
| open ditch lineal feet (Roads)  | 8,226,256        | 7,838,016                                       | 7,838,016                          | 7,116,780                                      | 7,087,728  | 6,547,000   | 6,530,503  | 6,538,337  | 6,648,285   |                                  |                                  |
| <ul> <li>cross culverts (Roads) &amp; access tiles<br/>(duplicated numbers in previous<br/>budget) cross culverts = 24,517</li> </ul> | 62,723           | 47,381  | 47,381                             | 46,185   | 45,131   | 41,210  | 41,049   | 40,951   | 41,246  |                                  |                                  |
| bridges (Roads)   | 223              | 195   | 195                                | 185  | 184  | 179   | 177  | 178  | 187   |                                  |                                  |
| mowable slopes pass miles(Roads)  | 4,291            | 4,779   | 4,779                              | 4,163.2  | 4,136  | 3,936   | 3,971  | 3,963  | 4,254   |                                  |                                  |
| • residential R/D facilities (WLRD)   | 1,196            | 1,466 (incl.<br>City contracts)                 | 1371                               | 1371   | 1371   | 393   | 1536   | 1593   | 1612  |                                  |                                  |
| commercial & multifamily R/D facilities<br>(WLRD)   | 1,455            | 1,427 (incl.<br>City contracts)                 | 1139                               | 1136   | 1136   | 1137  | 1167   | 1261   | 1303  |                                  |                                  |
| commercial & multifamily conveyance-<br>only facilities (WLRD)  | 300              | 325   | 390                                | 420  | 460  | 458   | 463  | 474  | 478   |                                  |                                  |
| <ul><li>regional R/D facilities (WLRD)</li></ul>  | 124              | 118   | 131                                | 170  | 180  | 186   | 190  | 195  | 199   |                                  |                                  |
| MAINTAIN DRAINAGE FACILITIES (MAINTENANCE)  |                  |   |                                    |  |  |   |  |  |   |                                  |                                  |
| ALL TYPES OF FACILITIES   |                  |   |                                    |  |  |   |  |  |   |                                  |                                  |
| Apply K.C. Ord 5824, Sections 7B, 9A, & 9D (R/D maintenance)  | yes              | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| Apply SWDM standards to new County BMP facilities   | yes              | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| Investigate all R/D complaints  | yes              | 1260 drainage<br>complaints, 150<br>R/D related | YTD 180 incl. 18<br>R/D related    | 940 drainage<br>complaints, 217<br>R/D related | 918 drainage<br>complaints, 256<br>R/D related                       | 531 incl. 176<br>R/D related  | 878, 142 R/D<br>related  | 742, 207<br>facility related   | 577, 177 Facility<br>Related  |                                  |                                  |
| Investigate and prioritize drainage problems  |                  | 60 corrective<br>WOs issued                     |                                    | 65 corrective wo's issued                      | 50 corrective<br>WO's issued   | 34 corrective<br>WO's issued  | 40 corrective<br>WO's issued   | 101 corrective<br>WO's issued  | 63-corrective<br>WQ's issued  |                                  |                                  |
| RESIDENTIAL R/D   |                  |   |                                    |  |  |   |  |  |   |                                  |                                  |
| Inspect new residential systems for maintenance needs during first 2 years after construction @ 4x/yr                                 | yes              | 65 facilities                                   | 70 facilities                      | 80 facilities                                  | 80 facilities  | 95 facilities   | 130 facilities   | 107  | 163 facilities  |                                  |                                  |
| Evaluate need of each existing residential R/D w/MIS for assessment   | yes              | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| Schedule R/D assessments considering seasonal workload ("phased assessments")   |                  | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| COMMERCIAL FACILITIES   |                  |   |                                    |  |  |   |  |  |   |                                  |                                  |
| Inspect conveyance-only commercial drainage systems   | Yes<br>(0.9 FTE) | Yes<br>(0.9 FTE)                                | yes (0.9 FTE)                      | new facilities<br>only (30)                    | new facilities<br>only (30)  | Program<br>discontinued for<br>CY 2000  | Program<br>discontinued for<br>CY 2001                                       | Program<br>discontinued for<br>CY 2002                                     | Program<br>discontinued for<br>CY 2003                                    |                                  |                                  |
| Use MIS to inventory facilities and organize work program (includes laptop hookups for field technicians)                             | yes              | yes   | yes                                | yes  | Yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| Self-inspection & maintenance of privately owned commercial and multifamily R/D facilities  | yes              | 904 in program                                  | 907                                | 900 in program                                 | No (County<br>inspected 1136<br>facilities, incl.<br>City contracts) | No self-<br>inspection.<br>(County<br>inspected 1136<br>facilities, incl.<br>City contracts.) | No self inspection. (County inspected 1167 facilities incl. City contracts.) | No self inspection (County inspected 1240 facilities incl. City contracts. | No-self inspection- (County inspected 1303 facilities incl City contracts |                                  |                                  |
| REGIONAL R/D  |                  | T   | Г                                  | Т  | T  | T   | T  | Т  |   |                                  |                                  |
| Annual inspections of regional R/D  | yes              | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |
| Inspect regional R/D facilities needing frequent maintenance before anticipated   | yes              | yes   | yes                                | yes  | yes  | yes   | yes  | yes  | yes   |                                  |                                  |

| Task   | 1996                 | 1997<br>(Jan-Aug)<br>(1997 Report)  | 1997<br>(Jan-Dec)<br>(1998 Report) | 1998<br>(Jan-Dec)<br>(1999 Report) | 1999<br>(Jan-Dec)<br>(2000 Report)  | 2000<br>(Jan-Dec)<br>(2001 Report)  | 2001<br>(Jan-Dec)<br>(2002 Report)  | 2002<br>(Jan-Dec)<br>(2003 Report)   | 2003<br>(Jan-Dec)<br>(2004 Report)   | 2004<br>(Jan-Dec)<br>2005 Report | 2005<br>(Jan-Dec)<br>2006 Report |
|--|----------------------|---|------------------------------------|------------------------------------|---|---|---|--|--|----------------------------------|----------------------------------|
| storms and after all major storms  |                      | (1001 Hopordy   | (1000 Hoperty                      | (1000 Hopony                       | (_ccc repery  | (2001 1100011)  | (======================================   | (_ccc repert)  | (2001110)  |                                  |                                  |
| FACILITIES WITHIN ROAD RIGHTS-OF-WAY   |                      | •   | 1                                  | •                                  |   | 1   | •   | •  |  | 1                                |                                  |
| Routine Maintenance <sup>1</sup>   |                      | Proposed  | Actual                             | Actual                             | Actual  | Actual  | Actual  | Actual   | Actual   |                                  |                                  |
| • curb & gutter (Roads)  | 11,186<br>linear ft  | 559   | 1,274                              | 1,960                              | 1,697   | 1,556   | 1,336   | 3,127  | 2,863  |                                  |                                  |
| hand ditching (Roads)  | 1,558 linear<br>ft   | 5,487   | 1,487                              | 638                                | 1,674   | 552   | 2,181   | 1,230  | 1,953  |                                  |                                  |
| drainage tile (Roads)  | 15,427<br>linear ft  | 6,070   | 25,826                             | 20,255                             | 13,115  | 5,628   | 8,716   | 9,312  | 5,178  |                                  |                                  |
| <ul> <li>vactor catch basin/manhole (Roads)</li> </ul>                         | 7,646                | 8,599   | 5,775                              | 3,399                              | 2,664   | 5,029   | 3,279   | 2,717  | 3,217  |                                  |                                  |
| <ul> <li>blade ditching/ shoulder pulling<br/>(Roads)</li> </ul>               | 750,010<br>linear ft | 556,041   | 637,592                            | 742,303                            | 342,510   | 629,010   | 706,169   | 885,932  | 529,990  |                                  |                                  |
| • clean drain systems—equip (Roads)  | 126,003<br>linear ft | 93,378  | 125,435                            | 94,662                             | 72,605  | 159,444   | 200,567   | 87,173   | 58,981   |                                  |                                  |
| • clean drain systems—hand (Roads)   | 6,958                | 9,211   | 4,698                              | 5,345                              | 3,253   | 1,285   | 3,293   | 4,059  | 4,715  |                                  |                                  |
| drainage preparation (Roads)   | 942 man<br>hours     | 1,105   | 523                                | 248                                | 519   | 261   | 408   | 522  | 660  |                                  |                                  |
| • repair catch basins (I & II)(Roads)  | 579                  | 164   | 435                                | 11,056                             | 212   | 163   | 211   | 49   | 138  |                                  |                                  |
| • repair headers/trash rack (Roads)  | 183                  | 166   | 94                                 | 20                                 | 24  | 4   | 7   | 20   | 28   |                                  |                                  |
| bucket ditching (Roads)  | 239,532<br>linear ft | 272,763   | 273,729                            | 196,381                            | 63,544  | 56,444  | 142,208   | 120,859  | 137,807  |                                  |                                  |
| • replace catch basins (I & II)(Roads)   | 133                  | 95  | 174                                | 844                                | 124   | 49  | 84  | 94   | 58   |                                  |                                  |
| <ul> <li>replace catch basin lids (Roads)</li> </ul>                           | 208                  | 161   | 172                                | 164                                | 191   | 139   | 100   | 213  | 153  |                                  |                                  |
| • hydroseeding (Roads)   | 65,550<br>square yds | 219,464   | 19,394                             | 15,919                             | 12,135  | 21,417  | 22,835  | 54,385   | 24,600   |                                  |                                  |
| ditchmaster ditch clean (Roads)  | 228,870<br>linear ft | 228,870   | 0                                  | 14,828                             | 0   | 1,724   | 0   | 0  | 0  |                                  |                                  |
| IMPROVEMENTS TO EXISTING ROAD DRAINAGE SYSTEM                                  |                      |   |                                    |                                    |   |   |   |  |  |                                  |                                  |
| linear feet of pipe  |                      | 14,419  | 6,874                              | 8,516                              | 5,615   | 11,743  | 10,130  | 8,428  | 7,059  |                                  |                                  |
| new catch basins   |                      | 203   | 107                                | 116                                | 102   | 166   | 135   | 143  | 124  |                                  |                                  |
| • \$'s of erosion control  |                      |   | N/A                                | \$256,052                          | \$181,749   | \$438,639   | \$73,995  | \$82,936   | 60,896   |                                  |                                  |
| REMOVE SNOW AND ICE FROM ROADS   |                      |   |                                    |                                    |   |   |   |  |  |                                  |                                  |
| Use salt and sand combination  |                      | 8,984   | 6,502                              | 16,897                             | 6,505   | 11,319  | 9,965   | 22,407   | 13,187   |                                  |                                  |
| BMPs to minimize water quality impacts (sweep sand off road ASAP after storm)  | yes                  | yes   | yes                                | yes                                | yes   | yes   | yes   | yes  | Yes  |                                  |                                  |
| USE ROADS MAINTENANCE BMPs   |                      |   |                                    |                                    |   |   |   |  |  |                                  |                                  |
| Finish BMP manual for K.C. Road<br>Maintenance Operations                      | no                   | yes (revisions<br>on-going based<br>on testing &<br>cost)                       |                                    |                                    | Developing Tri- County Road Maintenance Manual. After Tri-County Manual Developed, King County Will use Tri-County as minimum | Plan to adopt BMP Manual as revised in the tri- county negotiations for protection of Salmon and bull trout this year. (Timing is uncertain.) | Regional Road Maintenance ESA Program Guidelines currently published in the Federal Register with Public comment closed 2/25/02 | Regional Road Maintenance ESA Program Guidelines currently published in the Federal Register with Public comments currently being added. | Regional Road Maintenance ESA Program Guidelines has been approved. The Biological Opinion was received on August 5, 2003 by NMFS. |                                  |                                  |
| Evaluate BMPs for cost-effectiveness Implement BMPs for ESC on Road's projects |                      | full implemen-<br>tation for CIPs;<br>partial<br>implemen-tation<br>for mainte- |                                    | yes<br>yes                         | requirements. Yes – ongoing Environmental Supervisor position created. to provide field support and                           | Yes – ongoing Environmental Supervisor filled. Provides field support and supervises BMP  | Yes – ongoing Environmental Supervisor filled. Provides field support and supervises BMP  | Yes – ongoing Environmental Supervisor filled. Provides field support and supervises BMP   | Yes – ongoing Environmental Supervisor and Environmental Unit Staff Provide Field  |                                  |                                  |

<sup>&</sup>lt;sup>1</sup> Figures in this section and those that follow do not include city contracts. Figures for 1996 submitted with 1997 report and for 1997 with the 1998 report. no partial year data available. Page 2

| TASK | 1996 | 1997<br>(Jan-Aug)   | 1997<br>(Jan-Dec) | 1998<br>(Jan-Dec) | 1999<br>(Jan-Dec)   | 2000<br>(Jan-Dec)                       | 2001<br>(Jan-Dec)                       | 2002<br>(Jan-Dec)                       | 2003<br>(Jan-Dec)  | 2004<br>(Jan-Dec) | 2005<br>(Jan-Dec) |
|------|------|---|-------------------|-------------------|---|---|---|---|--|-------------------|-------------------|
| _    |      | (1997 Report)   | (1998 Report)     | (1999 Report)     | (2000 Report)   | (2001 Report)                           | (2002 Report)                           | (2003 Report)                           | (2004 Report)  | 2005 Report       | 2006 Report       |
|      |      | nance (need<br>10% budget<br>increase for full<br>implementation) |                   |                   | supervises BMP<br>Implementation<br>on Maintenance<br>Projects. | Implementation on Maintenance Projects. | Implementation on Maintenance Projects. | Implementation on Maintenance Projects. | Support and<br>Supervises BMP<br>Implementation<br>on Maintenance<br>Projects. |                   |                   |

| Map stormwater drainage   |      |  |             |   |  |   |  |   |   |  |
|---|------|--|-------------|---|--|---|--|---|---|--|
| FACILITIES  |      |  |             |   |  |   |  |   |   |  |
| Map facilities in public road rights-of-way   |      | (see map - faci-<br>lities completed)  | continuing  | continuing  | continuing   | continuing  | Continuing   | Continuing  | Continuing  |  |
| Work with WLRD on complete connectivity between right-of-way and off-right-of-way drainage systems. [WLRD withdrew from the mapping program in 1995.] |      |  | no          | no  | no   | no  | no   | Reinstated Nov<br>2002  | Continuing  |  |
| Develop GIS macro for mapping R/D facilities and complaints   |      | near completion  | in progress | in progress   | in progress  | in progress   | Complete   | Complete  | Complete  |  |
| DISPOSE OF VACTOR WASTE   |      |  |             |   |  |   |  |   |   |  |
| Provide a network of vactor waste receiving stations for public & private sector  | none | 1 liquid-only for KC gov't users in Shoreline     1 liquid and solid for all w/ GRCC training opens in Renton in Oct. if Council agrees on rate structure. Delayed due to flood repairs. |             | 2 liquid and solid construction in 98 open in 1999     1 liquid and solid for all w/ training opened in Renton in July. | 2 stations to open mid 1999 one in south and one in north. | <ul> <li>North end site, Bruggers Bog, to open in the summer. Includes disposal of solids and liquids.</li> <li>South end site, Star Lake, to open in 2001. Delay due to permit issues with municipalities .</li> </ul> | <ul> <li>North End station, Bruggers Bog and Renton Station open. Includes disposal of solids and liquids.</li> <li>South end site, Star Lake, to open in 2002. Delay due to permit issues with municipalities.</li> </ul> | North End station (Brugger's Bog) and Renton Station open. Includes disposal of solids and liquids. | South end site, Star Lake, opened to KC and WSDOT use only in late March of 2002. No plan to open to any other users. Includes disposal of solids and liquids. Preliminary Feasibility Studies Conducted on Redmond Site.   |  |
| Improve disposal process:   |      |  |             |   |  |   |  |   | Oite.   |  |
| solids to vendors who recycle and reuse end product   | yes  | yes  | yes         | yes   | yes  | Yes   | Yes  | Yes   | Street Waste Materials Screened, Bioremediated and Tested for Contaminants. Clean soils used in Roads Mine Reclamation Projects. Contaminated Materials Consigned to Contractors for Thermal Desorption or Bioremediatio n. |  |

| portable water treatment plant for<br>remote sites where sewer connections<br>are not cost-effective | yes | yes  | yes | yes   | yes   | Continuing  | Discontinued with the opening of the North End station and the anticipated opening of the south end station.  | No. No sewer connection at Star Lake. Liquid is transported by 6,000 gal. wastewater tanker to KC Renton Decant station for disposal.    | Portable Treatment Plant Sold. Bog and Renton Station Connected to Sewer. Decant Liquids from Star Lake Station, and Cadman and Summit Ponds transported by 6,000 gal. Wastewater Tanker to Renton Decant station for disposal to Sewer. |  |
|--|-----|--|-----|---|---|---|---|--|--|--|
| recycle treated water in vactors and<br>street sweepers  | no  | not yet— portable treatment plant purchased, storage tanks not yet constructed (budgeted funds diverted to flood damage—may yet construct for KC govt. use only in Issaquah & Summit areas |     | Planting operation undergoing tests for DOE approval for three sites Summit, Cadman, and Issaquah | To be operated at South County station opening in mid 1999. | Due to budget cuts from I-695 funding for this effort may be lost. Liquids are currently planned to be trucked from these sites to locations where they can be decanted to sewer. | Experimental studies were conducted to determine cost and effectiveness of use for recycled water from the wastewater treatment plant in Renton. Water was used in dust control, watering newly planted vegetation, charging Renton's decant settling vault, and use in sweeper trucks. | Did not use recycled water from Metro's wastewater treatment plant to recharge Renton Decant Station settling vault. Not cost effective. | Did not use recycled water from Metro's wastewater treatment plant to recharge Renton Decant Station settling vault. Not cost effective.   |  |
| course for operators required before     County facilities can be used                               |     | yes  |     | yes   | yes   | yes   | Yes   | Yes  | Yes  |  |
| offer required course through GRCC   |     | yes  |     | no  | no  | no  | No  | No   | No   |  |
| Joint venture vactor station in south K.C. (w/WSDOT & cities)  |     | ,,,,   |     | no  | no  | no  | No  | Yes. See Star<br>Lake above.   | Yes. See Star<br>Lake above.   |  |

| OBSERVE NPDES INDUSTRIAL  |            |  |     |   |     |                              |   |  |   |  |
|---|------------|--|-----|---|-----|------------------------------|---|--|---|--|
| STORMWATER PERMITS  |            |  |     |   |     |                              |   |  |   |  |
| Use BMPs in SWPPPs for operating  |            | yes  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| facilities and mining/filling sites   |            |  |     |   |     |                              |   |  |   |  |
| Monitor consistent with the permit monitoring plans                                 |            | yes  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| Recycle road maintenance waste material (debris)                                    |            | yes, as feasible   | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| Use BMPs as per SWPPPs for storage and handling of road debris                      |            | yes  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| PRACTICE INTEGRATED VEGETATION MANAGEMENT   |            |  |     |   |     |                              |   |  |   |  |
| Implement plan policies in road rights-of-<br>way                                   |            |  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| Develop cost estimates for full implementation of the IVMP                          | no         |  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| Fund the IVMP   | no         |  | yes | yes   | yes | yes                          | yes   | Yes  | Yes   |  |
| OTHER ACHIEVEMENTS  |            |  |     |   |     |                              |   |  |   |  |
| Study impacts of road shoulder types to water quality & quantity (Roads, WSDOT, UW) | continuing | done (8 ft<br>porous<br>pavement shoul-<br>der will detain<br>and treat a high<br>percentage of<br>roadway runoff) |     | Working with<br>regulatory<br>agencies to<br>adopt as BMP |     | Negotiating as time permits. | Included as part of the BMPCase Studies in the Regional Road Maintenance ESA Program Guidelines | Included as part<br>of the BMPCase<br>Studies in the<br>Regional Road<br>Maintenance<br>ESA Program<br>Guidelines. | Included as part of the BMP Case Studies in the Regional Road Maintenance ESA Program Guidelines. |  |